



THE CONESTOGA WAGON

In a typical summertime scene, an American family on a busy interstate highway is heading toward the next stop on its vacation. Sharing the four lanes with this family, in addition to a stream of other passenger cars, are dozens of tractor trailers carrying their heavy freight to many destinations. The scene shifts. It is a few hours later; the family has left the interstate, and it is visiting a museum of early American rural life. The object of its admiration is a large Conestoga wagon with its distinctive sloping lines, built early in the nineteenth century.

This may appear to be a study in contrasts, but the differences are not as great as they may seem. In the late eighteenth and early nineteenth centuries—long before the era of tractor trailers, and before the development of a railroad system—Conestoga wagons were the primary vehicles for hauling freight. These wagons carried flour and other farm products from the hinterland to the cities, and they brought back commodities needed by the farmers and their families. This was especially true during the period from about 1750 to 1855, particularly in Pennsylvania and the neighboring states of Maryland, Virginia, and Ohio.



The name "Conestoga" has been applied to an early Indian group, to a river, to a valley, to a trail and road, to a manor, and to a now-extinct breed of horses. All of these are identified with Pennsylvania's Lancaster County, known as "the nation's breadbasket." It was across the rich farmlands of that county and on the road connecting Lancaster with Philadelphia that the massive four-wheeled wagons, generally drawn by four to six Conestoga horses, first appeared.

Skilled workers were needed to build these wagons. And around 1770, Lancaster included among its craftsmen five wheelwrights, thirteen blacksmiths, seven turners, and twenty woodworkers.

Aside from the use of a saw and a turning lathe, everything about the Conestoga wagon was crafted with hand tools. Its bed, sloping upward from the middle, was usually fashioned out of white oak for the frame and poplar for the boards. Flooring and side boards were a half-inch to five-eighths of an inch thick; if the wagon was to be used for carrying ore at an iron furnace, the boards would be cut even thicker. Many parts of the wagon bed were braced with iron, and hand-made rivets secured the boards to the frame. Although there was little uniformity in its dimensions, the wagon bed generally measured sixteen feet in length, four feet in width, and four feet in depth. A dip toward the center took the weight of the load off the end gates in case the cargo shifted as the wagon made its way up and down hilly country. The end gates were held in position by a chain and staple that allowed the gate to be dropped for loading and unloading.

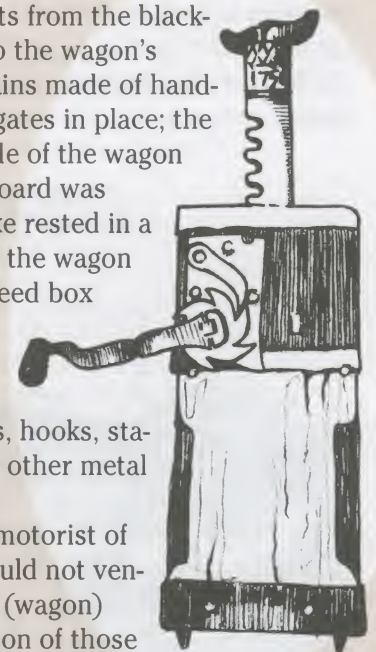
Arching over the wagon bed was a series of wooden hoops, securely stapled to the side boards. Depending upon the size of the wagon, these might number from six to thirteen, and over them was stretched the familiar white top made of homespun or canvas. Roped to the side boards and drawn taut over the projecting end bows, this canopy stretched twenty-four feet or more, giving the impression of a great sheltering bonnet. The fabric was often soaked in linseed oil for waterproofing to give greater protection to the wagon's contents.

The front wheels of the wagon stood about three and a half feet high, and the rear wheels var-

ied between four and four and a half feet. One test of a good wagon was in its axles and hubs, and the wheelwright was quite exacting in their fabrication. Axles and crossbeams were made from tough hickory wood and the hubs from black or sour gum, a fibrous wood with a high resistance to splitting. Rough roads made it essential that axles, hubs, and wheel spokes be sturdily built. For passage through muddy spots and crossing streams, the iron tire rim required a broad surface. Widths varied from two to six inches, but experience proved a four-inch rim most satisfactory. Iron rims were usually made of two pieces of iron a half-inch thick, bent to the exact size of the wheel and welded at both joints. Fitting the iron rim over the wooden wheel was quite an undertaking—a blacksmith's job that called for dexterity and an exact sense of heat judgment. A fire was built around the iron rim, and when the rim was thought to be sufficiently hot it was lifted by means of tongs, placed around the wooden wheel, and hammered into position. Cold water was then poured over the hot iron to shrink it to a tight fit. If the iron was too hot it might burn the wheel, if not hot enough there was danger of a poor fit, and if cooled too suddenly the rim could split.

Numerous products from the blacksmith's shop went into the wagon's construction. Stay chains made of hand-forged links held end gates in place; the tool box on the left side of the wagon just back of the lazy board was ornately hinged. An axe rested in a decorated socket, and the wagon tongue (or pole) and feed box were both strengthened and beautified by fancy ironwork. Brake shafts, linchpins, hooks, staples, and latches were other metal accouterments.

Like the cautious motorist of today the wagoner would not venture a trip without his (wagon) jack. The worn condition of those that remain is witness to their necessary and frequent use. For many years the blacksmith who



Conestoga wagon jack.



Conestoga wagon in Lancaster, Pa. 1908. Note the man standing on the wagon's "lazy board" from which the wagoner sometimes drove the team. (PHMC)

"ironed" the wagon also made the jack. It also served to identify the wagon's owner, as his initials and the date of making the wagon were generally cut into the vertical bar (rack) of the jack. The jack had to be capable of raising loads of four tons or more, so it needed to be solidly built. Ordinarily it was slung on the rear axletree alongside the feed and water buckets and the tar bucket that contained pine tar lubricant.

With its Prussian-blue body, bright red running gear, and its white cover—what did a wagon cost? In a time when the dollar commanded far more labor and material than it does today, it took four people—the wheelwright and blacksmith and their helpers—doing several weeks of continuous work to complete the wagon and its sundry articles of equipment. A finished wagon, approximately twenty-six feet long, eleven feet high, weighing between three thousand and thirty-five hundred pounds, and capable of holding five hogsheads or thirty barrels of flour, cost the equivalent of about \$250—an incredibly low figure by today's standards.

By contrast, the four to six powerful Conestoga horses that pulled the wagon were valued at about \$170 to \$200 each. The lineage of the Conestoga horse is not definitely known. One tradition holds that William Penn sent three Flemish stallions into the Conestoga Valley, where they were bred with Virginia mares. Another supposition is that, since most of the earlier Conestoga horses were black, they might be the offspring of the black cart horses common in England, ancestors of the great black horses of France that carried William the Conqueror and his armor-clad Normans to the Battle of Hastings in 1066. The bays and dappled gray Conestogas were very likely the result of mixed breeding with such strains as the Suffolk Punch and Chester Ball.

In temperament the Conestoga horse was generally docile and steady. It stood seventeen hands (about five feet tall to its shoulder), was well muscled, weighed about eighteen hundred pounds, and had a longish stride that could cover about twelve to fourteen miles a day. The wagoner

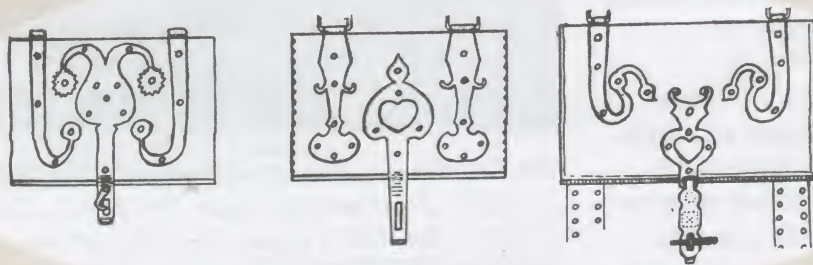
placed his heaviest and best horses nearest the wagon, for they had the job of turning and backing. Farmers and wagoners took pride in their animals, kept them well groomed and fed, and went to no little expense in fitting them out with good harnesses and fancy trimmings. Bridles were adorned with rosettes and sometimes elaborate headbands or pompoms; forelocks might be gaily trimmed with ribbon and colored loops.

On many wagons, each horse sported a set of bells (cone- or pear-shaped, not round) which produced a melodious ringing that heralded the approach of the Conestoga. These bells were made of brass or iron and mounted on a wooden or metal arched frame. Each frame customarily carried between three and five bells, those on the lead horses being the smallest, those on the swing horses somewhat larger, and those on the wheel horses the largest. Tradition holds that these were common on Pennsylvania teams in the nineteenth century, but on the National Road (which ultimately became U.S. 40) they apparently were fairly rare. It is said that, in some areas, the unlucky driver whose wagon became stuck or disabled was obliged to surrender his bells to the rescuing wagoner. The reassuring statement, "I'll be there with bells on," seems to have originated in wagoning days.

On the road the Conestoga wagoner did not ride inside his vehicle but either walked beside his team, rode the wheel horse (the rearmost horse on the left) or perched himself precariously on the lazy board, a stout oak board that pulled out from beneath the wagon bed immediately in front of the left rear wheel.

From this position he had a good view of the road ahead, and from it he or his assistant operated the brake. The lone wagoner often picked up a hitchhiker who would work the brake for him when the going was rough. Driving from the left side of the Conestoga, when other vehicles were driven from the right, made this a forerunner of the current practice of driving from the left side of the vehicle.

Driving a team of horses pulling a load of four to six tons over miles of narrow, rutted road demanded toughness and stamina from driver, team, and wagon. Two groups were engaged in wagoning: the professional teamsters or "regulars" and the "sharpshooters." The latter—many of them Pennsylvania Germans—were farmers who went into this work on a seasonal or casual basis when time permitted, or when the earnings looked good. The "regulars"—much like their modern counterpart, the overland truck driver—were a tough, resourceful group. They were seasoned by weather and experience, ready to fight for a load, and not hesitant about forcing another team off the road if the right-of-way was disputed. They particularly abhorred the "sharpshooters" who "horned in" when wagons were in strong demand to move goods out of overflowing commission houses, or when a serious break in the canal meant full loads at high rates. A "regular" might conceal brass knuckles or a blackjack in his rough homespun jacket, and his pockets might bulge with inexpensive cigars called "stogies"—presumably a corruption of "Conestoga"—that he smoked to keep the dust out of his throat. His pants were of homespun and sometimes of leather, and a



*Conestoga tool box lids.
(Landis Valley Museum)*

flat wide-brimmed hat gave some protection from sun and rain.

On warm summer nights the wagoner would stop where dusk overtook him. The team would be fed, watered, and tied down before he prepared his own meal, and if a number of wagons were in caravan, jokes and stories would be swapped across the flames as supper cooked. On winter nights he headed for a tavern. Here he drove his wagon onto planks to keep the wheels from freezing to the ground, saw that his horses were cared for, and then entered the relative warmth of the tavern's interior where he could fortify himself with good food and ale, and swap yarns before stretching out for a night's rest on the floor.

Wagoners and taverns were inevitable complements, and so it is not surprising that the first known printed reference to a wagon of this type is in the *Pennsylvania Gazette* for February 26, 1750, citing a tavern on Philadelphia's Market Street between Fourth and Fifth named the "Conestoga Wagon." At the other end of the Conestoga Road, in Lancaster, the wagoner could find Christian Martin's tavern, "The Sign of the Conestoga Wagon."

The Conestoga wagon deserves full appreciation for all that it was, but it is also important to understand what it was not. There are, in fact, two misconceptions that should be put to rest.

First, the Conestoga wagon did not play a key role in the westward migration across the United States that took place throughout the nineteenth century. The prairie schooners or "Western wagons" that were prominent in that migration were modified farm wagons, in contrast to the Conestogas which were freight wagons. Whereas the Conestoga wagons were distinguished by their beautifully proportioned sloping design, the Western wagons had much straighter utilitarian lines.

Second, the primary reason for the boat-like design of the Conestoga wagons was probably aesthetic, even though the slope of the wagon bed toward the center did help prevent the shifting of heavy loads. It is incorrect to maintain that the wagon box was boat-shaped

so that travelers could float themselves and their goods across streams. Because of the method of its construction, making such a wagon water-tight would have been impossible; if anyone were to have been so foolhardy as to place the wagon in water, it would have leaked like a sieve.

Conestoga wagons, as long-distance haulers of heavy freight, had their peak of activity between about 1820 and 1840. The expansion of America's railroad lines in the middle of the century rapidly brought their use to a end. By the time of the Civil War, Conestoga wagoning was already thought of as a romantic episode of past history. Their manufacture had come to an end, and the Conestogas that remained were relegated to short-distance hauling, put away in barns, or left in the fields to rot. Soon, it appeared, the Conestoga wagon would be only a memory.

In recent decades, however, the genuine beauty of these wagons has increasingly captured the imaginations of collectors and the general public. Commemorative journeys by



The Gingrich wagon is one of the finest remaining examples of a Conestoga wagon. The wagon is on exhibit at the PHMC's Landis Valley Museum in Lancaster. (PHMC)

Conestoga wagons have, from time to time, received wide publicity, and ever greater numbers of them have been placed in the protective custody of museums to be admired by visitors such as the family described at the beginning of this leaflet. In spite of the relentless encroachment of technology upon our culture, the Conestoga wagon with its classic grace seems now assured of a permanent place in Pennsylvania's and America's memory.

text by Norman B. Wilkinson and George R. Beyer

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